THE HEARING CONSERVATION PROGRAM:

A BRIEFING FOR FORCES AFLOAT

OPNAVINST 5100.19 (NAVOSH Afloat)

- For Fleet Commanding Officers
- Covers Occupational Health and Safety for Forces Afloat
- Chapter B4 covers HCP
- Navy/DoD must meet or exceed OSHA, alt
  “military unique
  exempt from

OPNAVINST 5100.23 (NAVOSH Ashore)

- Covers all aspects of occupational health & safety in the workplace
- Industrial operations and CBs are examples of covered activities
- Chapter 18 describes Navy HCP

NEHC TECH MANUAL 6260.51.99 series

- Title is “Navy Medical Department Hearing Conservation Program Procedures”
- Provides detailed guidance for Medical Department personnel to support the program requirements identified in the OPNAV Instructions

GOAL of Navy HCP:

"To prevent occupational hearing loss and ensure auditory fitness for duty in the military and civilian workforce"

Navy Instruction Contents (General)

Important Terms

- **HCP personnel**: all military and civilian personnel routinely exposed or whose duties will require exposure to hazardous levels of operational or occupational noise
- **Potentially hazardous noise**:
  - Continuous noise greater than 84 dBA
  - Impact or impulse noise 140 dB peak SPL
- **At risk:**
  - Having a Time Weighted Average noise exposure of over 84dBA
  - Absent dosimetry, routinely exposed to noise >84dBA
- **Routinely exposed:** Informally, 2 or more days per month

5 Elements in HCP:

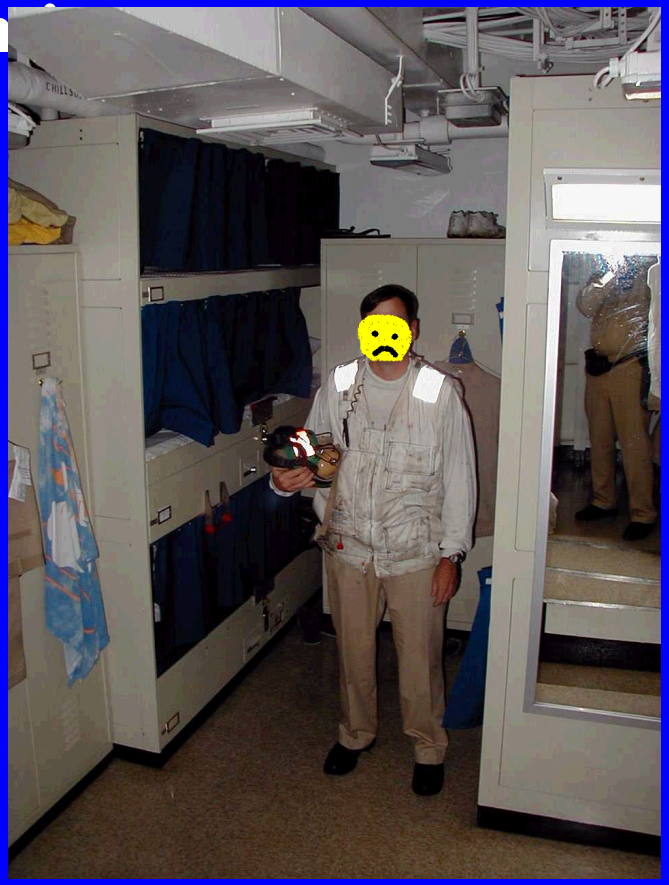
1) Conduct Noise Surveys

- Identify potentially noise hazardous spaces and equipment
- Label noise hazardous areas and equipment with appropriate labels
- Determine individuals employed in hazardous noise areas, for enrollment in HC

HCP Element #2

Apply engineering controls

- **Primarily Echelon 2 action**
  - **Methods include enclosing noise source, baffling, lubrication, acoustic barriers, etc.**
  - **Must have feasibility study on file if worker exposed to 100dBA for 4 or more hours**
  - **Combat equipment and exterior of tactical vessels exempt**
  - **Hearing protection is <u>alternate</u> way to protect workers (engineering controls <u>primary</u>)**



HCP Element #3:

In absence of effective engineering controls, enroll exposed personnel in HCP and provide:

<u>Personal hearing protective devices (HPDs) which reduce actual exposure to safe levels</u>

- **Double protection (earplug + ear muff) needed if noise >104 dBA or >165dB Peak (in MCO)**
- **Single protection needed if 140 dB peak**
- **Combination of HPD's with administrative controls if H not reduce expos 84dBA**

HCP Element #4:

Provide reference and monitoring audiometry to detect noise induced hearing loss at earliest feasible interval

- **To monitor the effectiveness of the over-all HCP**
- **To identify both temporary hearing loss (auditory fatigue) and permanent hearing loss from noise and other sources**
- **To determine the need for referral**
- **To assure equitable compensation for someone who has been handicapped by an occupationally noise-induced hearing loss**

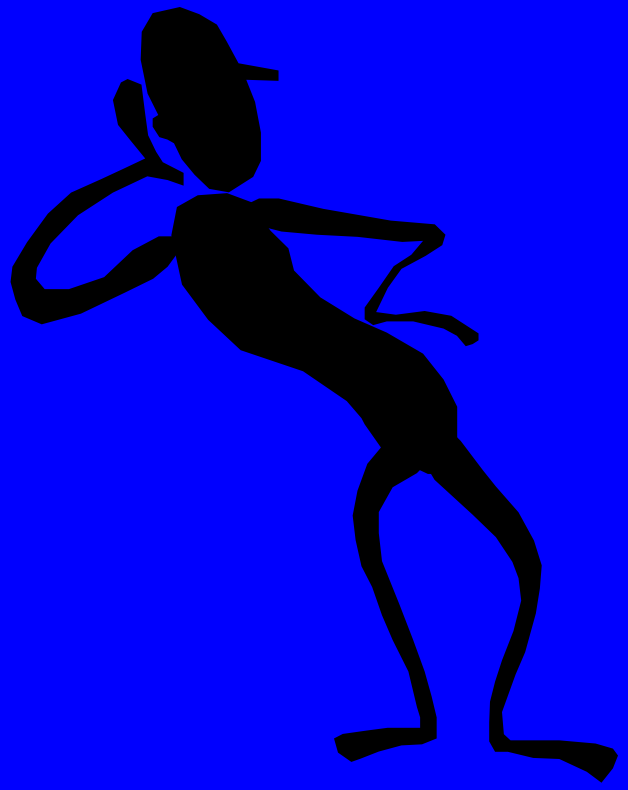
HCP Element #5:

Educate noise-exposed personnel about the consequences of unprotected noise exposure & the means to protect themselves

- **1 hour of initial training required prior to initial exposure, with following elements included:**
  - **HCP elements and rationale**
  - **HPD use and maintenance**
  - **Command program and their individual responsibilities**
  - **Recognizing hazards of off-duty recreational noise**
- **"Appropriate" annual refresher training**
  - **training in conjunction with monitoring**

Approved Types of HPD's:

- Earplugs
  - Pre-formed
    - Single Flange
    - Triple Flange
  - Hand-formed
- Noise Muffs
- Ear Canal Caps
- Helmets

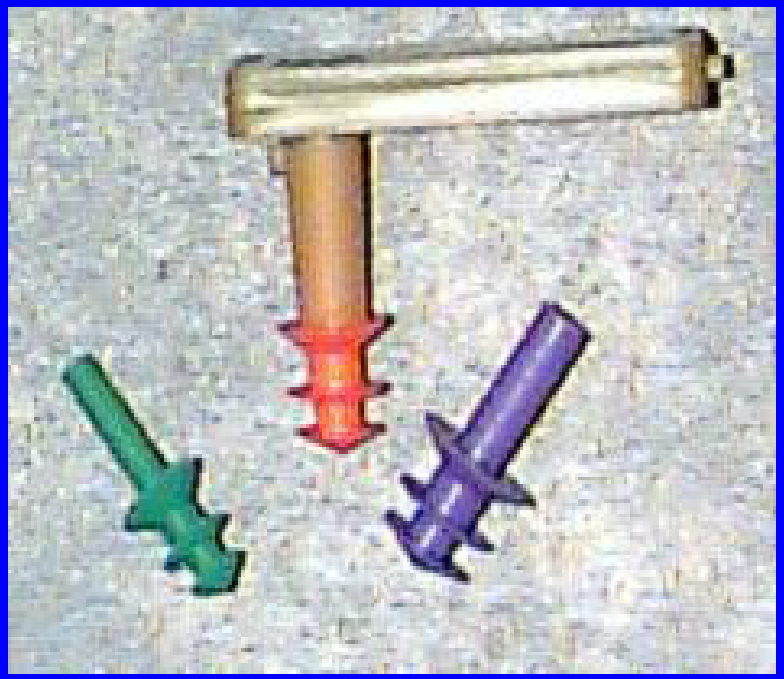


Pre-Formed (Vinyl) Earplugs

Single Flange: (discontinued, some existing stock remains)

- **Noise Reduction Rating (NRR)=23dB**
- **5 color-coded sizes:**
  - **White (Extra Small)**
  - **Green (Small)**
  - **Orange (Medium)**
  - **Blue (Large)**
  - **Red (Extra Large)**

Pre-Formed Earplugs (cont.):



Triple Flange:

- NRR= 26dB
- 3 color coded sizes:
  - **Green** (Small)
  - **Orange** (Medium)
  - **Blue** (Large)
- Clean vinyl earplugs with soap & warm water

FITTING TECHNIQUE:

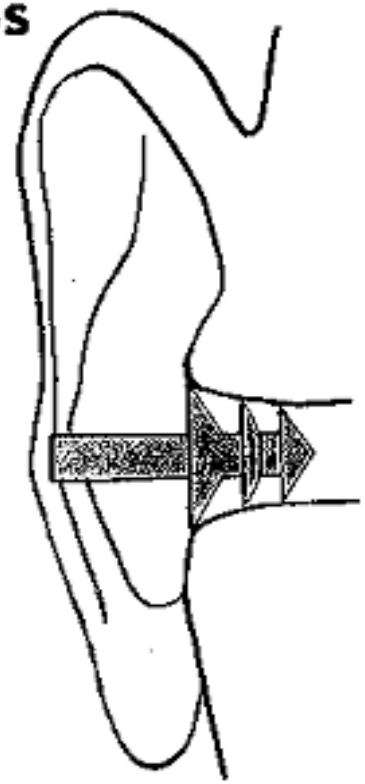
FOR MAXIMUM PROTECTION AND COMFORT INSERT TRIPLE FLANGE EARPLUGS AS FOLLOWS:

1. MAKE THE EAR CANAL ACCESSIBLE BY REACHING OVER HEAD WITH OPPOSITE HAND AND PULLING EAR OUTWARD.

2. GRASP PLUG FIRMLY BEHIND LARGEST FLANGE.

3. INSERT SMALLER FLANGE IN EAR CANAL. PUSH AND TWIST TOWARD REAR-CENTER OF HEAD.

4. IF A GOOD SEAL IS NOT OBTAINED, USE SMALLER OR LARGER SIZE. TRIPLE FLANGE PLUGS ARE AVAILABLE IN THREE SIZES- LARGE, REGULAR, AND SMALL.



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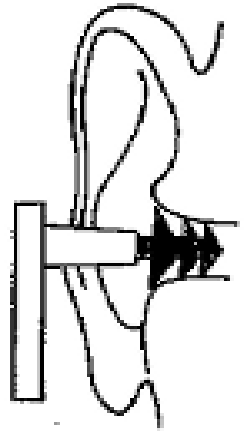
FITTING TECHNIQUE (cont.)

EARPLUG SEATING DEVICE AND CARRYING CASE

TRIPLE-FLANGE EARPLUGS (INSERTION INSTRUCTIONS):

A. INSERT STEM OF PLUG IN OPEN END OF CASE LID.

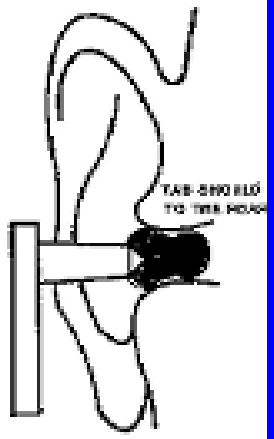
B. PUSH AND WIGGLE PLUG TOWARD REAR-CENTER OF HEAD



SINGLE-FLANGE EARPLUGS (INSERTION INSTRUCTIONS):

A. GRASP PLUG TAB BETWEEN THUMB AND FOREFINGER AND INSERT INTO EAR CANAL.

B. USE POINTED END OF CASE LID TO IMPROVE SNUG FIT.

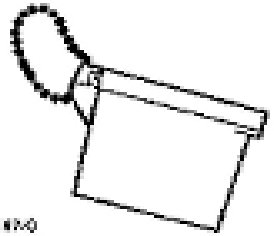


GENERAL INSTRUCTIONS:

A. WHEN NOT IN USE, KEEP PLUGS IN CARRYING CASE.

B. ENSURE THAT PLUGS ARE CLEANED WITH SOAP AND WATER AND ARE DRY WHEN RETURNED TO THE CASE.

C. WEAR YOUR EARPLUG CARRYING CASE (WITH EARPLUGS) AS PART OF YOUR WORK UNIFORM. THEY ARE PART OF YOUR PERSONAL ISSUE AND ARE TO BE RETAINED UPON CHANGE OF STATION.



(CASE AND EARPLUG INSERTER, PLASTIC, NO FEE FLUCTUS, 2BB, NSN 6515-01-100-1870)

Hand Formed Foam Earplugs

- New Dynamics ("Sound Guard") currently the only approved vendor of medium foam plugs (NSN 6515-00-137-6345)
- NRR=28dB, deeply inserted
- Can also order (GSA contract) small and large sized foam plugs. Aearo SuperFit 30 is small size, and SuperFit 33 is large size.
- These plugs have a colored center band to check fit. Sound Guards also have this feature.
- NRR about same as m
  if properly inserted

New version of foam plug appeared summer of 2003, incorporates the fitting ring concept.

Insert yellow end first.

A good fit will result in 2/3

of plug in ear canal,

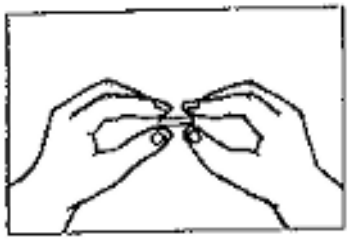
no yellow visible.

Fitting Technique (cont):

FOAM EARPLUGS

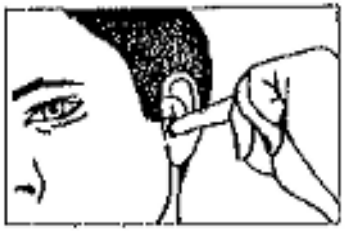
FOR MAXIMUM EFFECTIVENESS AND COMFORT INSERT FOAM EARPLUGS (NSN 6515-00-137-6345) AS FOLLOWS: IMPORTANT – HANDS AND PLUGS SHOULD BE CLEAN PRIOR TO USE. DO NOT USE WHERE HAZARDOUS CHEMICALS OR MATERIALS COULD BE TRANSFERRED TO PLUG.

1 WITH BOTH HANDS GRASP THE ROUND SIDE OF THE PLUG. SLOWLY ROLL AND COMPRESS THE PLUG INTO A VERY THIN, CREASE-FREE CYLINDER.

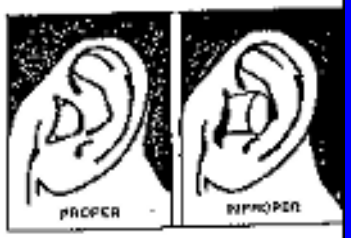


2 WHILE COMPRESSED, INSERT THE PLUG WELL INTO THE EAR CANAL. FITTING THE PLUG IS EASIER IF THE OPPOSITE EAR IS PULLED OUTWARD AND UPWARD DURING INSERTION.

3 WITH FINGERTIPS, GENTLY HOLD THE PLUG IN PLACE UNTIL IT BEGINS TO EXPAND AND BLOCK THE NOISE. QUALITY OF FIT MAY BE ESTIMATED BY OCCLUSION.



4 EARPLUG FIT CAN BE TESTED IN THE PRESENCE OF NOISE BY ALTERNATELY COVERING AND UNCOVERING THE EARS WITH TIGHTLY PRESSED HANDS. WITH PROPERLY FITTED PLUGS THE NOISE LEVELS SHOULD SEEM EQUALLY THE SAME WHETHER OR NOT THE EARS ARE COVERED. KEEP PLUGS CLEAN BY WASHING IN MILD SOAP AND RINSING THOROUGHLY IN WATER. DISCARD IF DISCOLORATION OR DISTORTION OCCURS AFTER CLEANING.



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QUESTIONS??